# BEFORE THE BOARD OF ENVIRONMENTAL REVIEW AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY OF THE STATE OF MONTANA

| In the matter of the amendment of ARM   | ) NOTICE OF PUBLIC HEARING ON |
|---|-------------------------------|
| 17.30.502, 17.30.619, 17.30.641,        | PROPOSED AMENDMENT            |
| 17.30.646, 17.30.702, 17.30.1001,       | )                             |
| 17.30.1007, 17.36.345, 17.55.102,       | (WATER QUALITY)               |
| 17.56.507, and 17.56.608, pertaining to | (SUBDIVISIONS)                |
| Department Circular DEQ-7               | (CECRA)                       |
| ·                                       | (UNDERGROUND STORAGE          |
|   | TANKS)                        |
|   |                               |

TO: All Concerned Persons

- 1. On January 30, 2008, at 9:00 a.m., the Board of Environmental Review and the Department of Environmental Quality will hold a public hearing in Room 111, Metcalf Building, 1520 East Sixth Avenue, Helena, Montana, to consider the proposed amendment of the above-stated rules.
- 2. The board and department will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact the board no later than 5:00 p.m., January 22, 2008, to advise us of the nature of the accommodation that you need. Please contact the board secretary at P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2544; fax (406) 444-4386; or e-mail ber@mt.gov.
- 3. The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:

<u>17.30.502 DEFINITIONS</u> The following definitions, in addition to those in 75-5-103, MCA, and ARM Title 17, chapter 30, subchapters 6 and 7, apply throughout this subchapter:

- (1) through (13) remain the same.
- (14) The board adopts and incorporates by reference dDepartment Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (February 2006 2008 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters. Copies of Department Circular DEQ-7 are available from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>17.30.619 INCORPORATIONS BY REFERENCE</u> (1) The board hereby adopts and incorporates by reference the following state and federal requirements

and procedures as part of Montana's surface water quality standards:

- (a) <u>dD</u>epartment Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (February <u>2006</u> <u>2008</u> edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters;
  - (b) through (d) remain the same.
- (e) 40 CFR 136 (July 1, 1991), which establishes guidelines and procedures for the analysis of pollutants;
- (f) (e) 40 CFR Part 136 (July 1, 2004 2007), which establishes guidelines and procedures for the analysis of pollutants; and
  - (g) remains the same, but is renumbered (f).
  - (2) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

<u>17.30.641 SAMPLING METHODS</u> (1) Water quality monitoring, including methods of sample collection, preservation, and analysis used to determine compliance with the standards must be in accordance with 40 CFR Part 136 (July 1, 2004 2007) or other method allowed by the department.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

17.30.646 BIOASSAYS (1) Bioassay tolerance concentrations must be determined using the latest available research results for the materials, by bioassay tests procedures for simulating actual stream conditions as set forth in 40 CFR Part 136 (July 2, 1991 1, 2007). Any bioassay studies made must be made using a representative sensitive local species and life stages of economic or ecological importance, except that other species whose relative sensitivity is known may be used when there is difficulty in providing the more sensitive species in sufficient numbers or when such species are unsatisfactory for routine confined bioassays. All bioassay methods and species selections must be approved by the department.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

- <u>17.30.702 DEFINITIONS</u> The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter (Note: 75-5-103, MCA, includes definitions for "degradation," "existing uses," "high quality waters," "mixing zone," and "parameter."):
  - (1) through (25) remain the same.
  - (26) The board adopts and incorporates by reference:
- (a) dDepartment Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (February 2006 2008 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters;

- (b) remains the same.
- (c) 40 CFR Part 136, as they existed on July, 1992 (July 1, 2007), which contains guidelines establishing test procedures for the analysis of pollutants.
  - (d) remains the same.

AUTH: 75-5-301, 75-5-303, MCA

IMP: 75-5-303, MCA

- <u>17.30.1001 DEFINITIONS</u> The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter:
  - (1) remains the same.
- (2) "DEQ-7" means <u>dDepartment</u> Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (February <u>2006</u> <u>2008</u> edition), which establishes water quality standards for toxic, carcinogenic, radioactive, bioconcentrating, nutrient, and harmful parameters.
- (a) The board adopts and incorporates by reference <u>dD</u>epartment Circular DEQ-7, entitled "Montana Numeric Water Quality Standards" (February <del>2006</del> 2008 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters.
  - (3) through (15) remain the same.

AUTH: 75-5-201, 75-5-401, MCA IMP: 75-5-301, 75-5-401, MCA

- 17.30.1007 SAMPLE COLLECTION, PRESERVATION, AND ANALYSIS METHODS (1) Methods of sample collection, preservation, and sample analysis used to determine compliance with the standards in this subchapter must be in accordance with 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants" (July 1997 2007), or the following:
  - (a) through (4) remain the same.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

- <u>17.36.345 ADOPTION BY REFERENCE</u> (1) For purposes of this chapter, the department adopts and incorporates by reference the following documents. All references to these documents in this chapter refer to the edition set out below:
  - (a) through (d) remain the same.
- (e) Department Circular DEQ-7, "Montana Numeric Water Quality Standards," (February 2006 2008 edition);
  - (f) through (2) remain the same.

AUTH: 76-4-104, MCA IMP: 76-4-104, MCA

<u>17.55.102 DEFINITIONS</u> In this subchapter the following terms have the meanings indicated below and are supplemental to the definitions in 75-10-701,

MCA:

- (1) through (5)(c) remain the same.
- (6) The department adopts and incorporates by reference:
- (a) remains the same.
- (b) <u>dD</u>epartment Circular DEQ-7, "Montana Numeric Water Quality Standards," (February 2006 2008 edition).

AUTH: 75-10-702, <del>75-10-704,</del> MCA IMP: 75-10-702, 75-10-704, MCA

<u>17.56.507 ADOPTION BY REFERENCE</u> (1) For purposes of this subchapter, the department adopts and incorporates by reference:

- (a) Department Circular DEQ-7, "Montana Numeric Water Quality Standards" (February 2006 2008);
  - (b) through (3) remain the same.

AUTH: 75-11-319, 75-11-505, MCA IMP: 75-11-309, 75-11-505, MCA

<u>17.56.608 ADOPTION BY REFERENCE</u> (1) For purposes of this subchapter, the department adopts and incorporates by reference:

- (a) Department Circular DEQ-7, "Montana Numeric Water Quality Standards" (February 2006 2008);
  - (b) through (3) remain the same.

AUTH: 75-11-319, 75-11-505, MCA IMP: 75-11-309, 75-11-505, MCA

REASON: The board is proposing the amendment of Montana's water quality rules in ARM 17.30.502, 17.30.619, 17.30.702, and 17.30.1001, to incorporate proposed revisions to Montana's numeric water quality standards contained in Department Circular DEQ-7 (February 2006 edition). The proposed revisions to the Circular fall into three categories: (1) adopt new surface and ground water standards for eight pesticides and associated metabolites recently detected in Montana's ground water; (2) adopt aquatic life standards for two chemicals that were promulgated by the U.S. Environmental Protection Agency (EPA) in February 2006; (3) update the reference in Department Circular DEQ-7 specifying the method of calculating toxic equivalency factors (TEF) used for dioxins and congeners; and (4) delete footnote 29 and specify in the columns next to arsenic that 10 μg/L is the numeric surface and ground water quality standard for that parameter.

In this rulemaking, the department is proposing to amend ARM 17.36.345 regarding subdivisions, ARM 17.55.102 implementing the Comprehensive Environmental Cleanup and Responsibility Act (CECRA), and ARM 17.56.507 and 17.56.608 implementing its underground storage tank program, in order to incorporate the board's revisions to Department Circular DEQ-7. These amendments are necessary to ensure that the department's programs for the regulation of water quality affected by remediation sites, underground storage tanks,

and subdivisions will use the most current version of Montana's numeric water quality standards adopted by the board.

The department is proposing to delete the reference to 75-10-704, MCA, as authority for the amendment to its CECRA rules, as that statute does not authorize the adoption of rules.

The revisions to Department Circular DEQ-7, and the reasons for them, are summarized below. Copies of DEQ-7 with the proposed revisions may be obtained by contacting Ann Harrie at Water Quality Planning Bureau, Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901, by phone at (406) 444-5361, or by e-mail at AHarrie@mt.gov, or may be obtained on-line at http://www.deq/mt.gov/wqinfo/Standards.

## INTERIM STANDARDS FOR PESTICIDES

The board is proposing to adopt numeric water quality standards for eight pesticides and associated metabolites that were recently detected in ground water by the Montana Department of Agriculture. These pesticides and metabolites are agricultural chemicals that have no federally promulgated standards adopted by EPA for the protection of water quality. Pursuant to 80-15-201(3), MCA, the board is required to adopt an "interim numerical standard" for ground water when there is no federally promulgated or published standard for an agricultural chemical that has been detected in Montana's ground water. The board is also required to review the interim standard whenever EPA promulgates a standard for the agricultural chemical at issue. 80-15-201(3), MCA.

The department, in conjunction with EPA, has developed interim standards for the following pesticides and metabolites detected in Montana's ground water: Azoxystrobin, Imazamox, Imidacloprid, Pinoxaden and its metabolites NOA 407854 and NOA 447204, Triallate, Triticonazole, Acetochlor Ethane Sulfonic Acid (Acetochlor ESA), Acetochlor Oxynallic Acid (Acetochlor OA), Alachlor Ethane Sulfonic Acid (Alachlor ESA), Alachlor Oxynallic Acid (Alachlor OA), Metolachlor, Ethane Sulfonic Acid (Metolachlor ESA), Metolachlor Oxynallic Acid (Metolachlor OA), Aminomethylphosphonic Acid (AMPA, glyphosate metabolite), Atrazine metabolites (deethyl, deisopropyl, and deethyl deisopropyl), Hydroxy Atrazine, and Imazamethabenz methyl acid (metabolite of Imazamethabenz-methyl ester).

The board finds that modifying DEQ-7 to adopt interim standards for the above-listed pesticides and metabolites is necessary in order to fulfill its statutory obligation to establish ground water standards for agricultural chemicals that have been detected in Montana's ground water. The board also finds that it is necessary and reasonable to adopt interim standards for surface waters that address these same pesticides and metabolites. The board could choose to adopt only ground water standards and meet the requirements of state law, but rejects that alternative as inconsistent with the policy of the state to "protect and maintain" all state waters, both surface and ground water. By adopting standards for surface waters as well as ground waters, Montana's surface waters will receive the same protection as ground water whenever state law mandates a ground water standard for an agricultural chemical.

#### AQUATIC LIFE CRITERIA

The board is proposing to adopt two numeric surface water standards for the protection of aquatic life in response to EPA's promulgation of nationally recommended criteria for Nonylphenol and Diazinon in February 2006, pursuant to Section 304(a) of the federal Clean Water Act. Although the 304(a) criteria do not impose any legally enforceable requirements, states and tribes are encouraged to use the criteria as guidance in the adoption of water quality standards.

The board finds it is necessary to adopt the proposed aquatic life standards recommended by EPA for the following reasons:

- (a) Diazinon is a pesticide that has had widespread use throughout the United States in urban areas, agricultural areas, and households. Although the use of the chemical has been banned in urban areas and households since 2004, Diazinon is moderately persistent in the environment and is often found in wastewater treatment plant discharges and in storm water runoff. Due to its widespread use and toxic effects, the board finds it is reasonable and necessary to adopt EPA's recommended criteria to ensure the protection of aquatic life.
- (b) Nonylphenol is an organic chemical produced in large quantities in the United States. It is toxic to aquatic life, causing reproductive effects in aquatic organisms. Nonylphenol is resistant to natural degradation in water and is often found in wastewater treatment plant discharges as a breakdown product from surfactants and detergents. Due to its toxic effects on fish and its potential to be discharged from wastewater treatment plants, the board finds it is reasonable and necessary to adopt EPA's recommended criteria for Nonylphenol.

## UPDATING METHODS TO CALCULATE TOXIC EQUIVALENCY FACTORS (TEF)

The board is proposing to amend DEQ-7 in order to update the methods currently used for calculating the TEF for dioxin and congeners. In the current edition, DEQ-7 refers to a document published by van den Berg, et al., in 1998. The board is proposing to amend the reference in DEQ-7 to incorporate the latest publication of van den Berg, et al., dated 2006, revising and updating the methods of calculating TEF. The board finds that this amendment is necessary in order to stay current with EPA's recommended guidance for calculating TEF.

#### <u>ARSENIC</u>

The board is proposing to delete footnote 29 and specify within the columns next to arsenic that the numeric water quality standard for both surface and ground water is 10  $\mu$ g/L. As currently written, there is no numeric water quality standard displayed in the columns next to arsenic. Instead, the reader is referred to footnote 29. Footnote 29 explains that, until EPA's newly adopted numeric water quality standard for arsenic becomes effective on January 23, 2006, Montana's numeric standards for arsenic would remain at 18  $\mu$ g/L for surface water and 20  $\mu$ g/L for ground water. The footnote also explains that on January 23, 2006, Montana's numeric water quality standard for arsenic for both surface and ground water would be 10  $\mu$ g/L. Since Montana's former standards for arsenic are no longer in effect,

there is no reason to retain the footnote. The board is therefore eliminating the footnote and changing DEQ-7 so that the "new" standard of 10  $\mu$ g/L (effective on January 23, 2006) is displayed in the columns next to arsenic.

### ARM 17.30.619, 17.30.641, 17.30.646, 17.30.702, 17.30.1007

The board is proposing the amendment of ARM 17.30.619, 17.30.641, 17.30.646, 17.30.702, and 17.30.1007 in order to incorporate the latest edition of the federal rules specifying EPA's approved methods of analyzing and sampling water under the federal Clean Water Act. This amendment is necessary to incorporate numerous modifications and updates to the sampling and analysis methods in 40 CFR Part 136 that became effective in March 2007. If the amendments are not made, the department will lack authority to use the revised sampling and testing procedures.

- 4. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted to the board secretary at Board of Environmental Review, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana, 59620-0901; faxed to (406) 444-4386; or e-mailed to ber@mt.gov, no later than 5:00 p.m., January 30, 2008. To be guaranteed consideration, mailed comments must be postmarked on or before that date.
- 5. Katherine Orr, attorney for the board, or another attorney for the Agency Legal Services Bureau, has been designated to preside over and conduct the hearing.
- 6. The board and department maintain a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name, e-mail, and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supplies; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to the board secretary at Board of Environmental Review, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; e-mailed to ber@mt.gov; or may be made by completing a request form at any rules hearing held by the board or department.

7. The bill sponsor notice requirements of 2-4-302, MCA, do not apply.

Reviewed by: **BOARD OF ENVIRONMENTAL REVIEW** 

/s/ James M. Madden BY: /s/ Joseph W. Russell

JOSEPH W. RUSSELL, M.P.H., JAMES M. MADDEN

Rule Reviewer Chairman

DEPARTMENT OF ENVIRONMENTAL

QUALITY

BY: <u>/s/ Richard H. Opper</u> RICHARD H. OPPER, Director

Certified to the Secretary of State December 10, 2007.